

Wednesday, 3/7/2007 2:35:02 PM
User: John Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services Drawing Name: FLOAT SKIDTUBE ASSEMBLY
 Job Number: 31030
 Estimate Number: 10309
 P.O. Number: N/A Part Number: D206642541
 This Issue: 3/7/2007 S.O. No. N/A Drawing Number: D3274 REV D
 Prsht Rev: NC Project Number: N/A
 First Issue: 3/7/2007 Type: LANDING GEAR Drawing Revision: D
 Previous Run: 31029 Material: N/A
 Due Date: 3/30/2007 Qty: 1 Um: Each
 Written By: _____
 Checked & Approved By: 07.03.07
 Comment: Est Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM
 Est Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D206-642-541 CHG003

KS 07-05-02 ①

2.0 D26001190 Extrusion Round 3" 206



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2600-1-190 3" OD Tube

B24841

3.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Cut D2600-1 to 190.00" in length as per Dwg D3274 and Deburr ends

2-Drill #40 Aft cap pilot hole using DT8025

3-Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274

4-Remove inner indexing ridge on aft end of skidtube as per Dwg D3274

5-Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

7-3-00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Seq. #:

Machine Or Operation:

Description:

4.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid Etch and Alodine tube as per QSI 005 4.1

JD 7-5-21

5.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

fm 07-03-21

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE 07-04-12

7.0

D3282041

I-Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3282-041 Float Web

330292

fm 07-04-12

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open Ø0.313" crossbolt spacer holes using DT8743 as per Dwg D3274

fm 07-04-12

2-Open Ø0.375" crossbolt spacer holes using DT8744 as per Dwg D3274

fm 07-04-12

3-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

fm 07-04-12

4-Bond web in place as per Dwg D3274 & QSI 015.

A/R Sikaflex-291

m103497

Sikaflex expire date:

07-10-01

Start:

07-04-12

Finish:

07-04-12

(Adhere for 12 hours)

fm 07-04-12

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

DP 7-4-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Seq. #:

Machine Or Operation:

Description:

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Bend tube using program D3274 as per Dwg D3274. Install drop pins in cross bolt spacer holes to maintain web position. *EL 7-4-25*

2-Cut Fwd end of tube to length as per Dwg D3274 *RL 07-04-25*

3-Remove inner indexing ridge on Fwd end of skidtube as per Dwg D3274 *fm 07-05-08*

4- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2 *fm 07-05-08*
OPEN HOLES TO .297"

5-DRILL TOE PIN HOLE .640" DIA AS PER DWG FWD END OF TUBE
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES *fm 07-05-08*

6- Countersink crossbolt spacer holes as per Dwg D3274 *fm 07-05-08*

PTO

11.0

D32851

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3285-1

Fwd Cap

B21744

BE 07-05-09

12.0

D2649

Crossbolt Spacer



Comment: Qty.: 12.0000 Each(s)/Unit Total: 12.0000 Each(s)

Pick:

Qty Part Number

Description Batch

12 D2649

Crossbolt spacer

B28250

BE 07-05-09

13.0

D32751

Crossbolt Spacer



Comment: Qty.: 12.0000 Each(s)/Unit Total: 12.0000 Each(s)

Pick:

Qty Part Number

Description Batch

12 D3275-1

Crossbolt spacer

B21748

BE 07-05-09

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
070502	10.0	Add A-QCS before welding						
	10.1	QCS Inspect work to correct step			1	0705-02	070502	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/05/24

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number:



Seq. #:

Machine Or Operation:

Description:

14.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld Fwd Cap as per Dwg D3274 and QSI 004. Use aluminum rod.

A/R Aluminum Rod

M 102421

RE 07-05-09

2-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod

A/R Aluminum Rod

M 102421

RE 07-05-09

3-Grind welds flush to Fwd cap on top surface only.

RE 07-05-09

4-Grind cross bolt welds flush as per Dwg D3274. Masking Tape access to inside of the skidtube

M 07-05-09 ①

5-Counterbore 5/16" x 0.750" deep as per Dwg D3274. Use DT8743 visual aid Jig and deburr.

M 07-05-09 ①

15.0

QC5/9

WELD INSPECTION



Comment: Inspect weld and Counterbore. Inspect for foreign objects as per QSI 024

16.0

POWDER COATING

POWDER COATING.



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

add 07-05-22 ①

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

M-L 07/05/22 ①

18.0

D3415041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3415-041

Nut Plate

B30837

19.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

M 14651 M-L 07/05/22

W/O:		WORK ORDER CHANGES					
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Job Number: 31030

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description:

2 CCR264SS3-3 Rivet

M14651

20.0

CR3212403

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CR3212-4-03 Rivet

M15918

21.0

ALS71032130

Insert



Comment: Qty.: 78.0000 Each(s)/Unit Total: 78.0000 Each(s)

Insert

Batch:

M102475

22.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



①

Comment: HAND FINISHING RESOURCE #1

1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.

A/RN/ALPS-3

M104161

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a

A/R Sikaflex-291

M103561

Sikaflex expire date:

67-10

M.H. 07/05/22

23.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect Nut Plate & Inserts

07-05-22 ①

24.0

AN3C4A

BOLT



①

Comment: Qty.: 80.0000 Each(s)/Unit Total: 80.0000 Each(s)

BOLT

Batch:

M104322

M.H. 07/05/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Job Number: 31030

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

D353515

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch:

B30750

26.0

D353523

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch:

B30760

*

27.0

D353535

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch:

B30751

28.0

D353539

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch:

B30752

*

29.0

D353615

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

B31994

30.0

D353623

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

B30754

31.0

D353635

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

B31996

m-h 07/05/22

①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Job Number: 31030

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

32.0

D353639

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

B30756

33.0

D35371

WEARPAD



Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)

WEARPAD

Batch:

B31998

34.0

D35373

WEARPAD



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARPAD

Batch:

B31726

35.0

AN960C10L

washer



Comment: Qty.: 80.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

80 AN960C10L

Washer

M104215

36.0

NAS1515H3L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 NAS1515H3L

Washer

M103641

37.0

D34131

Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3413-1

Ring

B24869

38.0

AN4C5A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

M.L. 07/05/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 31030

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description:

1 AN4C5A

Bolt

M18918

39.0

AN960C416

WASHER



✱

Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN960C416

Washer

M100993
M103338

40.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2646

Aft Cap

B30119

41.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

2-Install wearpads & gaskets as per Dwg D3274.

3-Install ring as per Dwg D3274

A/R Sikaflex-291

Sikaflex expire date:

M103561

07-10

4-Inspect for foreign objects as per QSI 024

5-Spray inside of tube on both sides of web with LPS-3

A/R LPS-3

Batch:

M104161

6-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-291

Sikaflex expire date:

M103561

07-10

①

M.R

07/05/22

42.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

2905-23 @

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Job Number: 31030

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

43.0

QC21

FINAL INSPECTION/W/O RELEASE



①

Comment: FINAL INSPECTION/W/O RELEASE

207105104

Job Completion



100 100

U 8/15/24

100 100

100 100

D206-642-572

100 100

100 100

100 100

100 100

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date :	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries



DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3274	REV. D SHEET 1 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY	SCALE NTS
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

RELEASED

07.02.12 **[Signature]**

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

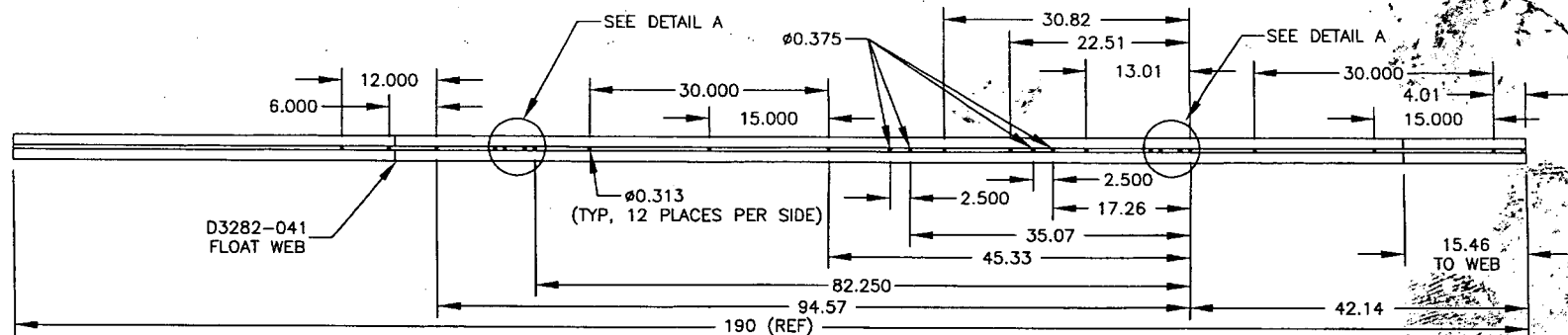
GENERAL NOTES:

- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- ALL HOLES DRILLED ON CENTERLINES.
- BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
- WELDING TO BE DONE PER DART QSI 004.
- FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

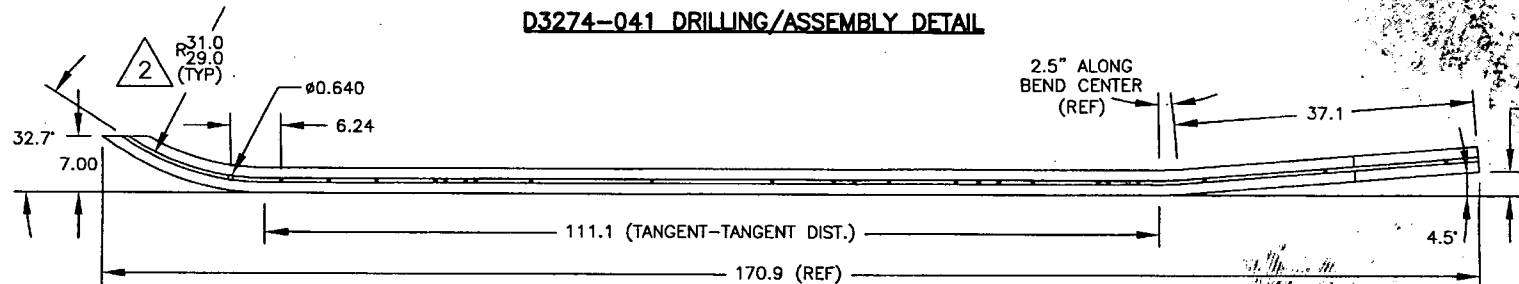
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. **31030**

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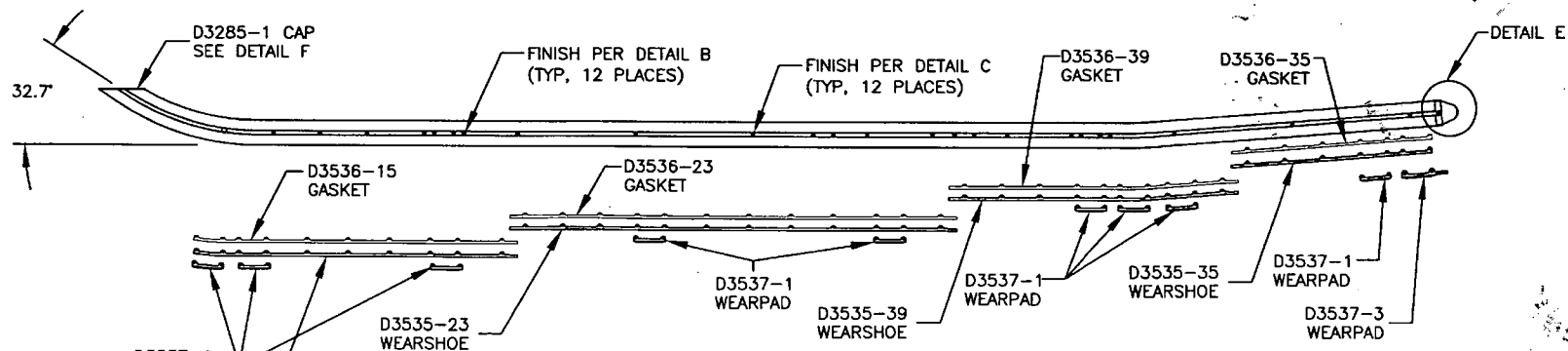
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D3274-041 DRILLING/ASSEMBLY DETAIL



D3274-041 BEND/DRILLING DETAIL



D3274-041 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

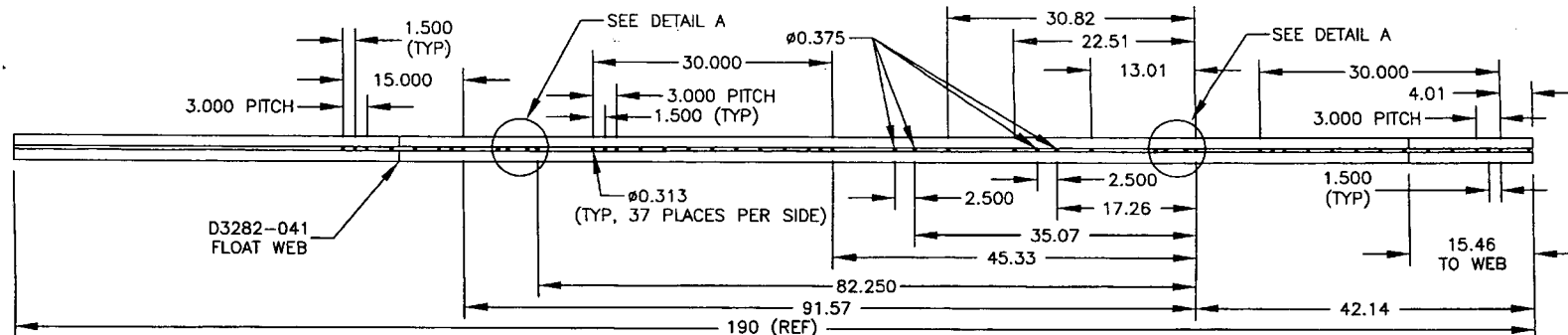
07.02.12

NO. 31030
WORK ORDER
SUBJECT TO AMENDMENT
WITHOUT NOTICE
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY

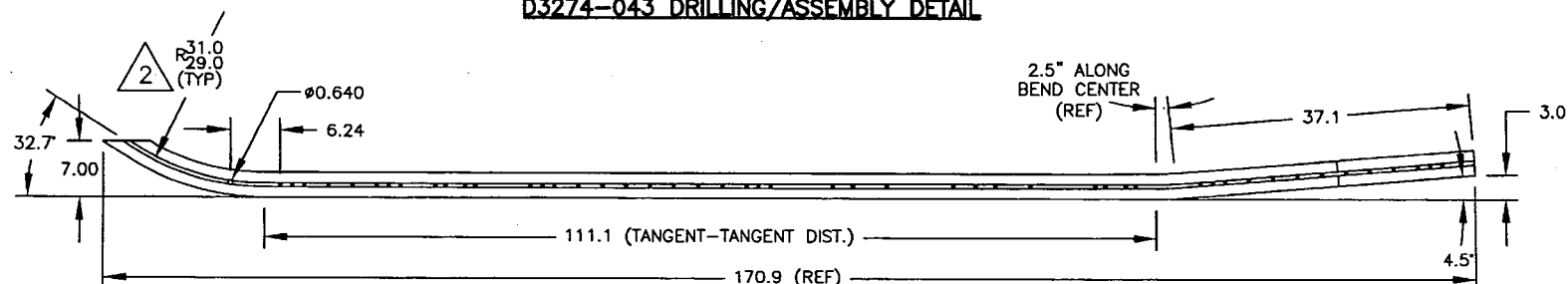
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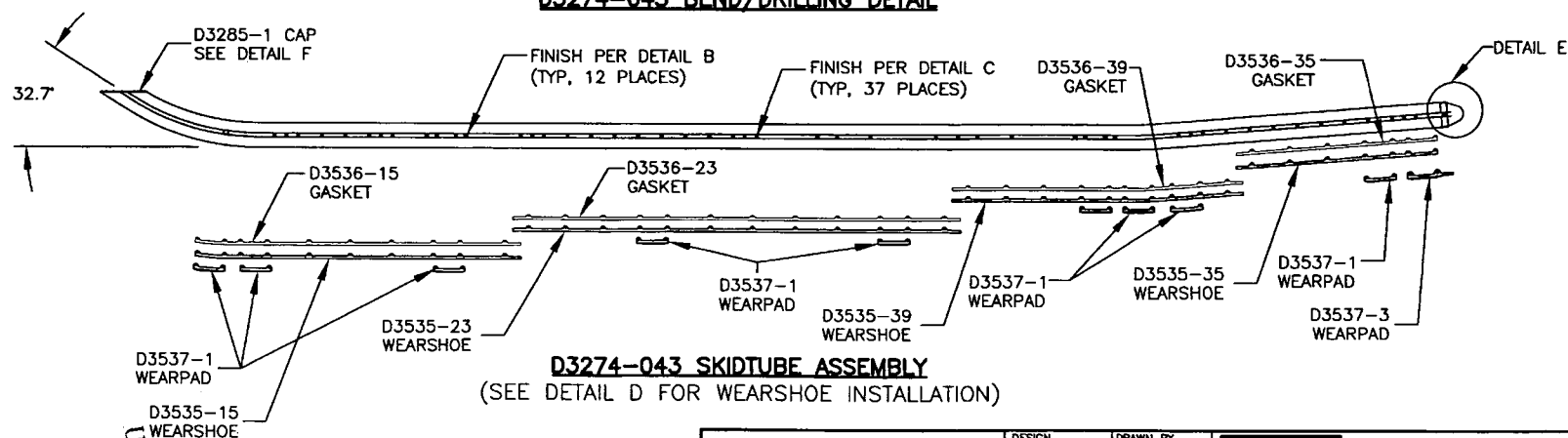
DESIGN	CP	DRAWN BY	PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA
CHECKED	#	APPROVED	#	DRAWING NO. D3274
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. D SHEET 2 OF 4 SCALE 1:15



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

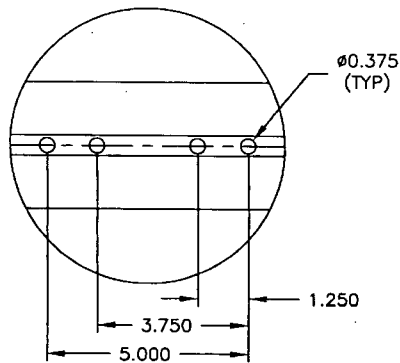
NO. 31030
WORK ORDER
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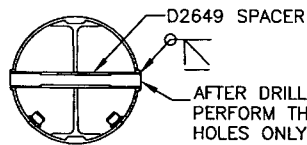
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DESIGN	CP	DRAWN BY	PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA	REV. D
CHECKED	#	APPROVED	#	DRAWING NO. D3274	SHEET 3 OF 4
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	SCALE	1:15

DETAIL A: DRILL DETAIL

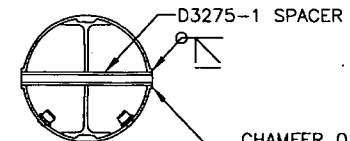


DETAIL B FOR 0.375 HOLES ONLY



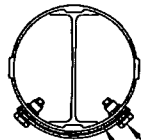
- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR 0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE TO 0.313x0.75 DEEP

DETAIL C FOR 0.313 HOLES ONLY



CHAMFER 0.030x45°
(TYP)

DETAIL D



- ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
AN960C10L WASHER (1)
(78 PLACES)

GASKET/WEARSHOE/WEARPAD (REF)

DETAIL E

- AN3C4A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(2 PLACES)
INSTALL WITH SIKAFLEX-241/-291

D2646 CAP

SEAL WITH
SIKAFLEX-241/291
ADHESIVE

0.208 (2 PLACES)
DRILL PRIOR TO INSTALLING
D2646 CAP

BORE OUT END OF SKIDTUBE
TO 0.75 DEPTH AND 0.070 WALL

0.400

DETAIL F: END FINISHING DETAIL

- CCR264SS3-3 RIVETS (2 PLACES)
INSTALL WITH LPS-3
CR3212-4-03 RIVETS (2 PLACES)
INSTALL WITH LPS-3
D3415-041 NUT PLATE,
LPS-3 ON FAYING SURFACE, LPS HARDCOAT ON EXTERIOR
D3413-1 RING
D3285-1 CAP (REF)

1.0
REMOVE RIDGE
ON INSIDE OF
SKIDTUBE LEAVE
0.070 MIN.

ORIENTATION
OF D3415-041

RELEASED
07.02.12

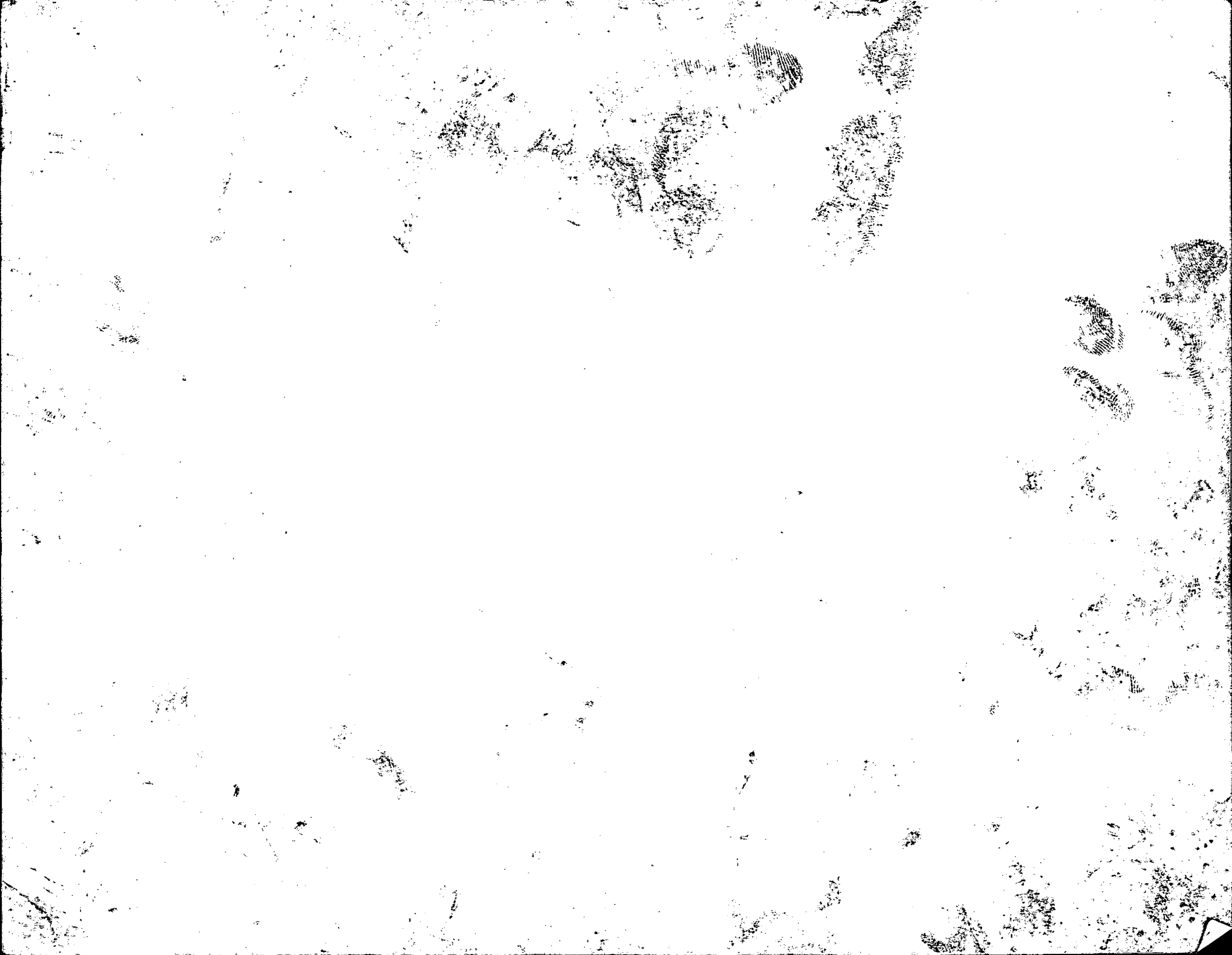
DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

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		DATE	06.12.19			TITLE SKIDTUBE ASSEMBLY	SHEET 4 OF 4 SCALE 1:3



NO. 106

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliott
Joint Welding Procedure TIG
Part number and Job number 206642241 / A318804

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS TIG
Penetration Complete ☒ Partial ☐ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07/24/27 Qualifier David [Signature]